

# Notice of Allowability

Application No.

09/916,406

Examiner

Habte Mered

Applicant(s)

KHANKHEL, SAEEDA

Art Unit

2616

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 06/26/2007.
2. ☒ The allowed claim(s) is/are 1-3,6,8-15,17-20,22-26 and 28-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other Attachment A - Claims Listing.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rodney B. Carroll and Brian C. Genco on 9/17/2007.

2. The claims have been amended as shown in Attachment A. Further, claim 12 in Attachment A has been amended as follows:

- In line 27 of claim 12, the first instance of "queue" is replaced with -- queues --

### *Allowable Subject Matter*

3. Claims 1-3, 6, 8-15, 17-20, 22-26, and 28-30 are allowed.

4. The following is an examiner's statement of reasons for allowance:

5. Independent **claim 1** and all of its dependent claims are allowable over the prior art of record since the cited references taken individually or in combination, fail to particularly teach a switching system for a telecommunications network, comprising: a multi-stage switch with a first stage having a plurality of input and two or more output sides, the output side concentrated relative to the input side; a second stage having input and output sides, the input side of the second stage coupled to the output side of the first stage and the output side of the second stage being comprised of

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a plurality of outputs, wherein the second stage is a non-recirculating sort and trap stage that receives a plurality of cells having unique and non-unique destination addresses in a first time slot; wherein the second stage further comprises a sorter substage for arranging the plurality of cells arriving at the second stage in the first time slot in a first order, the first order based upon the destination address and a priority for each one of the plurality of cells and a trap buffer coupled to the second stage, wherein the trap buffer comprises a number of first-in-first-out queues in a range between L first-in-first-out queues to N first-in-first-out queues, where N is the total number of input sides of the first stage and L is the total number of the output sides of the first stage, wherein for a plurality of cells arriving, at the second stage, the second stage places each cell having a unique destination address on a selected one of the plurality of outputs at a next subsequent time slot, ages each cell having a non-unique destination address until the destination address becomes unique and discards the oldest aged cell if the destination address does not become unique at a subsequent time slot.

6. Independent **claim 12** and all of its dependent claims are allowable over the prior art of record since the cited references taken individually or in combination, fail to particularly teach a high performance broadband ATM switching system, comprising: a concentrator stage having a plurality of input ports for the switching system and a plurality of outputs, the concentrator concentrating cells entering the switch on the plurality of input ports onto the plurality of outputs by discarding idle ones of the plurality of inputs; a non-recirculating Batchersorter trap stage having a plurality of inputs and a plurality of outputs, each of the plurality of inputs of the non-recirculating Batchersorter

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trap stage coupled to a corresponding one of the plurality of outputs of the concentrator stage; a plurality of output queues, each one of the output queues having an input coupled to a corresponding one of the plurality of outputs of the non-recirculating Batcher sorter trap stage and an output port for the switching system, each one of the plurality of output queues buffering cells exiting the switching system which share a common destination address; the non-recirculating Batcher sorter trap stage places, during a selected one of a plurality of time slots, selected ones of a plurality of cells arriving thereat during a first one of the plurality of time slots onto a selected one of the outputs thereof if said selected ones of the plurality of cells has a unique destination address for the selected time slot, wherein the non-recirculating Batcher sorter trap stage further comprises a sorter substage for ordering the plurality of cells arriving at the second stage in each one of the plurality of time slots based upon the destination address and a priority for each one of the plurality of arriving cells; and the non-recirculating Batcher sorter trap stage further comprises a trap buffer, wherein the trap buffer comprises a number of first-in-first-out queues in a range between L first-in-first-out queues to N first-in-first-out queues where N is the total number of input ports of the concentrator stage and L is the total number of the outputs of the concentrator stage, wherein selected ones of the plurality of cells arriving thereat during the first one of the plurality of time slots is aged until a next subsequent one of the plurality of time slots and discarded if the destination address of the oldest one aged cells does not become unique at a subsequent time slot.

7. Independent **claim 17** and all of its dependent claims are allowable over the prior art of record since the cited references taken individually or in combination, fail to particularly teach a broadcast network having a plurality of input and output sides, the broadcast network receiving, on the input side, a plurality of source cells from at least one source and a plurality of empty copy cells, the broadcast network copying data from selected ones of the plurality of source cells to selected ones of the empty copy cells to produce copies of said source cells; a non-recirculating Batchter sort-trap stage having input and output sides, the input side of the non-recirculating Batchter sort-trap stage coupled to the output side of the broadcast network for receiving the source cells and the copies of the source cells and the output side of the non-recirculating Batchter sort-trap stage being comprised of a plurality of outputs wherein the non-recirculating Batchter sort-trap stage further comprises a Batchter sorter substage for arranging the plurality of cells arriving at the second stage in the first time slot in a first order, the first order based upon a destination address and a priority for each one of the plurality of arriving cells, and wherein the non-recirculating Batchter sort-trap stage further comprises a trap substage, wherein the trap substage comprises N first-in-first-out queues where N is the total number of input sides of the broadcast network; and for a plurality of arriving cells, the non-recirculating Batchter sort-trap stage places, in a first time slot, each cell having a unique destination address on a selected one of the plurality of outputs of the Batchter sort-trap stage, ages each cell having a non-unique destination address for the first time slot at a next subsequent time slot in a buffer for storing not more than a pre-determined number of cells in any one of the time slots, and

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discards the oldest of each cells not having a unique destination address when the pre-determined number of cells having a non-unique destination address have been stored in the buffer in during any of the timeslots; wherein the plurality of arriving cells placed on the outputs of the Batcher sort-trap stage includes the source cells and the copies of the source cells.

8. The cited prior art, Huang et al (US 4, 516, 238), hereinafter referred to as Huang teaches a multi-stage switch with three distinct stags including a concentrator, a sort and trap stage, and an output stage. However the sort and trap stage recirculates cells and fails to teach a non-recirculating sort and trap stage. Huang also fails to disclose sorting the incoming cells based on both priority and destination address and discarding aged cells with non-unique destination address from the trap stage.

9. The cited prior art, Huang et al (US 4, 542, 497), hereinafter referred to as A.Huang teaches a multi-cast multistage switching system that has a broadcast network stage consisting of source sub-stage and copy sub-stage. A. Huang fails to disclose a trap substage. Further A.Huang fails to teach a non-recirculating sort and trap stage. Huang also fails to disclose sorting the incoming cells based on both priority and destination address and discarding aged cells with non-unique destination address from the trap stage.

10. The cited prior art, Green et al (US 5, 687, 324), hereinafter referred to as Green teaches a non-circulating sort and trap stage. Green teaches discarding the incoming cells to prevent overflow of the trap stage storing the aged cells with non-unique address. However, Green fails to teach sorting the incoming cells based on both priority

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and destination address and discarding aged cells with non-unique destination address from the trap stage in subsequent time slots. Green also fails to disclose a trap buffer comprising a number of FIFO queues ranging between L and N where N is the total number of the input ports of the switch and L is the total number of the output sides of the first stage.

11. The cited prior art, Cooperman et al (US 5, 862, 128), hereinafter referred to as Cooperman, teaches a merged buffer architecture wherein incoming cells are sorted based on both priority and destination address. Cooperman's merged buffer stores cells with both non-unique and unique destination address in the same buffer and uses a tracking mechanism to keep track of cells with non-unique destination address that are stored in the merged buffer till the final destination becomes available. Cooperman fails to teach discarding aged cells with non-unique destination address from the merged buffer in subsequent time slots and where L is greater than or equal to two.

12. The independent claims and all associated dependent claims of the instant Application are allowable because the cited prior arts references taken individually or in combination, fail to particularly teach a multi-stage switch with a first stage having a plurality of input and output sides and a non-circulating sort and trap second stage comprising a sorter substage and a trap substage, wherein the sorter substage arranges a plurality of incoming cells in a first order based on the priority and destination address of each incoming cell and wherein the trap substage is a trap buffer comprising a number of first-in-first-out queues ranging between L and N and where N is the total

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number of input sides of the first stage and L is the total number of the output sides of the first stage and the trap stage ages each cell in the buffer having a non-unique destination address during subsequent sequential time slots until the destination address becomes unique and sends the aged cells with unique destination address to the appropriate output in subsequent time slots and also discards the oldest aged cells with non-unique destination address from the trap buffer that have failed to have a unique destination address at a subsequent time slot.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on 571 272 7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HM  
09-14-2007



**DORIS H. TO**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**

Attorney Docket No: IDF 1614 (4000-04800)

Patent

Attachment A Claims Listing  
AMENDMENTS TO THE CLAIMS

***Listing of claims:***

1. (Currently Amended) A switching system for a telecommunications network, comprising:

- a) a first stage having a plurality of input and two or more output sides, said output side concentrated relative to said input side;
- b) a second stage having input and output sides, said input side of said second stage coupled to said output side of said first stage and said output side of said second stage being comprised of a plurality of outputs, wherein said second stage is a non-recirculating sort and trap stage that receives a plurality of cells having unique and non-unique destination addresses in a first time slot, wherein said second stage further comprises a sorter substage for arranging said plurality of cells arriving at said second stage in said first time slot in a first order, said first order based upon said destination address and a priority for each one of said plurality of cells; and
- c) a trap buffer coupled to said second stage, wherein said trap buffer comprises a number of first-in-first-out queues in a range between L first-in-first-out queues to N first-in-first-out queues, where N is the total number of said input sides of said first stage and L is the total number of said output sides of said first stage, wherein for a plurality of cells arriving, at said second stage, said

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second stage places each cell having a unique destination address on a selected one of said plurality of outputs at a next subsequent time slot, ages each cell having a non-unique destination address during subsequent sequential time slots until said destination address becomes unique, and discards the oldest said aged cell if said destination address does not become unique at a subsequent time slot.

2. (Original) The switching system of claim 1 wherein said first stage is a concentrator.
3. (Currently Amended) The switching system of claim 2 wherein said concentrator performs an N:L concentration on cells arriving in said first time slot.
- 4-5. (Canceled)
6. (Currently Amended) The switching system of claim 1~~[[5]]~~ wherein said sorter substage is a Batchier sorter.
7. (Canceled)

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8. (Currently Amended) The switching system of claim 1 wherein said second stage further comprises:

~~a) a sorter substage for arranging said plurality of cells arriving at said second stage in said first time slot in a first order, said first order based upon a destination address and a priority for each one of said plurality of arriving cells; and~~

a[[b]]) a trap substage for placing each one of said arriving cells having a unique destination address on a selected one of said plurality of outputs and aging each one of said arriving cells having a non-unique destination address,

b[[c]]) wherein said trap substage places said aged cells on selected ones of said plurality of outputs in selected ones of a series of at least one subsequent time slots, said trap substage selecting said subsequent time slot for a selected aged cell when said destination address for said selected aged cell becomes unique for said selected subsequent time slot, and discards an aged cell if the destination address does not become unique at a subsequent time slot.

9. (Original) The switching system of claim 8 and further comprising:

a) a third stage having an input side comprised of a plurality of inputs, each coupled to a corresponding one of said plurality of outputs of said second stage;

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- b) wherein, in said first time slot and each one of said series of at least one subsequent time slots, said second stage placing a cell having a unique destination address on a selected one of said plurality of outputs.

10. (Original) The switching system of claim 9 wherein said third stage further comprises a queuing stage.

11. (Original) The switching system of claim 10 wherein said queuing stage further comprises a plurality of queues, each having an input coupled to a corresponding one of said plurality of outputs of said second stage and an output; each one of said plurality of queues buffering cells having a common destination address to be output said switching system.

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12. (Currently Amended) A high performance broadband ATM switching system, comprising:

- a) a concentrator stage having a plurality of input ports for said switching system and a plurality of outputs, said concentrator concentrating cells entering said switch on said plurality of input ports onto said plurality of outputs by discarding idle ones of said plurality of inputs;
- b) a non-recirculating Batcher sorter trap stage having a plurality of inputs and a plurality of outputs, each of said plurality of inputs of said non-recirculating Batcher sorter trap stage coupled to a corresponding one of said plurality of outputs of said concentrator stage;
- c) a plurality of output queues, each one of said output queues having an input coupled to a corresponding one of said plurality of outputs of said non-recirculating Batcher sorter trap stage and an output port for said switching system, each one of said plurality of output queues buffering cells exiting said switching system which share a common destination address;
- d) said non-recirculating Batcher sorter trap stage places, during a selected one of a plurality of time slots, selected ones of a plurality of cells arriving thereat during a first one of said plurality of time slots onto a selected one of said outputs thereof if said selected ones of said plurality of cells has a unique destination address for said selected time slot, wherein said non-recirculating Batcher sorter trap

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stage further comprises a sorter substage for ordering said plurality of cells arriving at said second stage in each one of said plurality of time slots based upon said destination address and a priority for each one of said plurality of arriving cells; and

- e) said non-recirculating Batcher sorter trap stage further comprises a trap buffer, wherein said trap buffer comprises a number of first-in-first-out queues in a range between L first-in-first-out queue to N first-in-first-out queues, where N is the total number of said input ports of said concentrator stage and L is the total number of said outputs of said concentrator stage, wherein selected ones of said plurality of cells arriving thereat during said first one of said plurality of time slots is aged until a next subsequent one of said plurality of time slots and discarded if the destination address of the oldest one said aged cells does not become unique at a subsequent time slot.

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13. (Currently Amended) The switching system of claim 12 wherein said non-recirculating Batcher sorter trap stage further comprises:

- a) ~~a sorter substage for ordering said plurality of cells arriving at said second stage in each one of said plurality of time slots based upon said destination address and a priority for each one of said plurality of arriving cells; and~~
- b) a trap substage for placing, during each one of said plurality of time slots, each one of said plurality of cells having either a unique destination address or the highest priority among cells sharing a non-unique destination address on a selected one of said plurality of outputs, wherein for each one of said plurality of time slots, said trap substage selects cells for placement on said plurality of outputs from a set of cells comprised of cells arriving from said sorter substage during that one of said plurality of time slots and cells aged from the time slot immediately preceding that one of said plurality of time slots.

14. (Currently Amended) The switching system of claim 13 wherein said concentrator stage performs N:L concentrations on arriving cells ~~and wherein N is the number of input connections to said first stage and~~ L is the number of connections to said second stage.

15. (Original) The switching system of claim 13 wherein said sorter substage is a Batcher sorter.



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16. (Canceled)

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17. (Currently Amended) A multi-cast switching system, comprising:

- a) a broadcast network having a plurality of input and output sides, said broadcast network receiving, on said input side, a plurality of source cells from at least one source and a plurality of empty copy cells, said broadcast network copying data from selected ones of said plurality of source cells to selected ones of said empty copy cells to produce copies of said source cells;
- b) a non-recirculating Batcher sort-trap stage having input and output sides, said input side of said non-recirculating Batcher sort-trap stage coupled to said output side of said broadcast network for receiving said source cells and said copies of said source cells and said output side of said non-recirculating Batcher sort-trap stage being comprised of a plurality of outputs wherein said non-recirculating Batcher sort-trap stage further comprises a Batcher sorter substage for arranging said plurality of cells arriving at said second stage in said first time slot in a first order, said first order based upon a destination address and a priority for each one of said plurality of arriving cells, and wherein said non-recirculating Batcher sort-trap stage further comprises a trap substage wherein said trap substage comprises N first-in-first-out queues, where N is the number of said input sides of said broadcast network; and
- c) for a plurality of arriving cells, said non-recirculating Batcher sort-trap stage places, in a first time slot, each cell having a unique destination address on a

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selected one of said plurality of outputs of said Batcher sort-trap stage, ages each cell having a non-unique destination address for said first time slot at a next subsequent time slot in a buffer for storing not more than a pre-determined number of cells in any one of said time slots, and discards the oldest of each said cells not having a unique destination address when said pre-determined number of cells having a non-unique destination address have been stored in said buffer in during any of said time slots;

- d) wherein said plurality of arriving cells placed on the outputs of said Batcher sort-trap stage includes said source cells and said copies of said source cells.

18. (Original) The multi-cast switching system of claim 17 wherein said broadcast network further comprises:

- a) a source sort stage for sorting source and copy packets entering said source sort stage based upon a data source identifier for each one of said plurality of source packets and said plurality of copy packets; and
- b) a copy stage for copying data from source packets containing a first data source identifier to copy packets containing said first data source identifier.

19. (Currently Amended) The multi-cast switching system of claim 18 wherein said ~~non-recirculating Batchersort-trap stage further comprises:~~

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~~a) a sorter substage for arranging said plurality of cells arriving at said non-recirculating Batchersort trap stage in said first time slot in a first order, said first order based upon said destination address and a priority for each one of said plurality of cells; and~~

~~b) a trap substage for placing places each cell having said unique destination address on said selected one of said plurality of outputs and aging ages each cell having said non-unique destination address[[]], and~~

~~[[c)] wherein, in a next time slot, said trap substage places said aged cells on selected ones of said plurality of outputs if said non-unique destination address for said aged cells becomes unique in said next time slot, and discards an aged cell if the destination address does not become unique at a subsequent time slot.~~

20. (Original) The multi-cast switching system of claim 19 wherein said sorter substage is a Batchersorter.

21. (Canceled)

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22. (Currently Amended) The multi-cast switching system of claim 17 wherein said ~~non-recirculating Batcher-sort trap stage~~ further comprises:

a) ~~a Batcher-sorter substage for arranging said plurality of cells arriving at said second stage in said first time slot in a first order, said first order based upon a destination address and a priority for each one of said plurality of arriving cells; and~~

b) ~~a trap substage for placing places~~ each one of said arriving cells having a unique destination address on a selected one of said plurality of outputs and ~~aging-ages~~ each one of said arriving cells having a non-unique destination address, and

[[c)] wherein said trap substage places said aged cells on selected ones of said plurality of outputs in selected ones of a series of at least one subsequent time slots when said destination address for said selected aged cell becomes unique, and discards said aged cell not having a unique destination address in a subsequent time slot.

23. (Previously presented) The switching system of claim 8 and further comprising:

a) a third stage having an input side comprised of a plurality of inputs, each coupled to a corresponding one of said plurality of outputs of said second stage;

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- b) wherein, in said first time slot and each one of said series of at least one subsequent time slots, said second stage placing a cell having a unique destination address on a selected one of said plurality of outputs.

24. (Previously presented) The switching system of claim 9 wherein said third stage further comprises a queuing stage.

25. (Previously presented) The switching system of claim 10 wherein said queuing stage further comprises a plurality of queues, each having an input coupled to a corresponding one of said plurality of outputs of said second stage and an output; each one of said plurality of queues buffering cells having a common destination address to be output said switching system.

26. (Currently Amended) The switching system of claim 1[[5]] wherein each cell passes through the sorter substage and the trap substage only once.

27. (Canceled)

28. (Previously Presented) The switching system of claim 1 wherein said second stage further comprises logic circuitry for:

- a) monitoring said destination addresses of said plurality of cells arriving at said second stage;

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- b) monitoring said destination addresses of said cells in said buffer; and
- c) placing said cells in said buffer on said selected one of said plurality of outputs if said cell address becomes unique during said next time slot.

29. (Previously Presented) The high performance broadband ATM switching system of claim 12 wherein said non-recirculating Batcher sorter trap stage further comprises logic circuitry for placing, during a selected one of said plurality of time slots, selected ones of said plurality of cells arriving thereat during said first one of said plurality of time slots onto said selected one of said outputs thereof if said selected ones of said plurality of cells have a unique destination address for said selected time slot.

30. (Previously Presented) The multi-cast switching system of claim 17 wherein said non-recirculating Batcher sort-trap stage further comprises logic circuitry for:

- a) monitoring said destination addresses of said plurality of cells arriving at said second stage;
- b) monitoring said destination addresses of said cells in said buffer; and
- c) placing said cells in said buffer on said selected one of said plurality of outputs if said cell address becomes unique during said next time slot.

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**CONCLUSION**

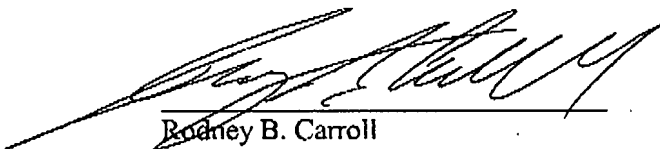
Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections is respectfully requested by Applicant. No new matter is introduced by way of the amendment.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,  
CONLEY ROSE, P.C.

Date: 9-17-07

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